

LISTING OF THE CLAIMS:

Please replace all prior claims in the application with the listing of claims below.

1-68. Canceled.

69. (New) A method of delivering a substance into an intradermal compartment of a human subject's skin, said method comprising administering the substance through at least one small gauge hollow needle having an outlet with an exposed height between 0 and 1 mm, said outlet being inserted into the skin to a depth of between 0.3 mm and 2 mm, such that delivery of the substance occurs at a depth between 0.3 mm and 2 mm, wherein the dosage of the substance for achieving a biological effect is reduced compared to when the substance is delivered to a subcutaneous compartment of the human subject's skin.

70. (New) The method of claim 69, wherein the biological effect is a therapeutic or diagnostic effect.

71. (New) The method of claim 69 wherein the administering comprises inserting the needle so that the substance is deposited at a depth of at least about 0.3 mm below the surface of the human subject's skin to no more than about 2 mm below the surface of the human subject's skin.

72. (New) The method of claim 69 wherein the administering comprises inserting the needle into the skin so that the substance is deposited at a depth of at least about 0.3 mm and no more than about 2 mm.

73. (New) The method of claim 69 wherein the substance is administered over a time period of not more than ten minutes.

74. (New) The method of claim 69 wherein the substance is administered at a rate between 1 nL/min. and 200 mL/ min.

75. (New) The method of claim 69 wherein the needle(s) are inserted substantially perpendicularly to the skin.

76. (New) The method of claim 69 wherein the dosage is reduced by at least 10% compared to subcutaneous injection.
77. (New) The method of claim 69 wherein the dosage is reduced by at least 20%.
78. (New) The method of claim 69 wherein the dosage is reduced by at least 30%.
79. (New) The method of claim 69 wherein the substance is a peptide, protein or nucleic acid.
80. (New) The method of claim 69 wherein the substance is a diagnostic or therapeutic substance.
81. (New) The method of claim 69 wherein the substance is hydrophobic.
82. (New) The method of claim 69 wherein the substance is hydrophilic.
83. (New) The method of claim 69 wherein the substance is a hormone.
84. (New) The method of claim 69 wherein the substance is selected from the group consisting of insulin, granulocyte stimulating factor and PTH.
85. (New) A method of delivering a substance into an intradermal compartment of a human subject's skin, said method comprising injecting or infusing the substance intradermally through one or more microneedles having a length sufficient to penetrate the intradermal compartment and an outlet at a depth within the intradermal compartment wherein the dosage of the substance for achieving a biological effect is reduced compared to when the substance is delivered to a subcutaneous compartment of the human subject's skin.
86. (New) The method of claim 85 wherein the length of the microneedle(s) is from about 0.5 mm to about 1.7 mm.
87. (New) The method of claim 85 wherein the microneedle is a 30 to 34 gauge needle.
88. (New) The method of claim 85 wherein the microneedle has an outlet depth of from 0 to 1 mm.
89. (New) The method of claim 85 wherein the microneedle is configured in a delivery device which positions the microneedle perpendicular to skin surface.

90. (New) The method of claim 85 wherein the microneedle is contained in an array of microneedles.
91. (New) The method of claim 90 wherein the array comprises 3 microneedles.
92. (New) The method of claim 90 wherein the array comprises 6 microneedles.
93. (New) The method of claim 85 wherein the substance is administered over a time period of not more than ten minutes.
94. (New) The method of claim 85 wherein the substance is administered at a rate between 1 nL/min. and 200 mL/min.
95. (New) The method of claim 85 wherein the microneedle(s) are inserted substantially perpendicularly to the skin.
96. (New) The method of claim 85 wherein the dosage is reduced by at least 10% compared to subcutaneous injection.
97. (New) The method of claim 85 wherein the dosage is reduced by at least 20%.
98. (New) The method of claim 85 wherein the dosage is reduced by at least 30%.
99. (New) The method of claim 85 wherein the substance is a peptide, protein, or nucleic acid.
100. (New) The method of claim 85 wherein the substance is a hormone.
101. (New) The method of claim 85 wherein the substance is hydrophobic.
102. (New) The method of claim 85 wherein the substance is hydrophilic.
103. (New) The method of claim 85 wherein the substance is selected from the group consisting of insulin, granulocyte stimulating factor and PTH.
104. (New) The method of claim 69 or 85 wherein the substance is used for the treatment of a symptom of a pathological condition.